

XOR PROCESSING INCORPORATING ERROR CORRECTION CODE DATA PROTECTION

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ABSTRACT OF THE DISCLOSURE

A method for operating a data processing system is provided. The method includes receiving a plurality of data segments, and for each of the plurality of data segments, generating an error correction code (ECC) corresponding to the data segment, said ECC providing at least one-bit error correction capability. Finally, an extended parity segment is calculated from the plurality of data segments and the corresponding ECCs, said extended parity segment including a parity segment calculated from the plurality of data segments and a parity ECC calculated from the corresponding ECCs.